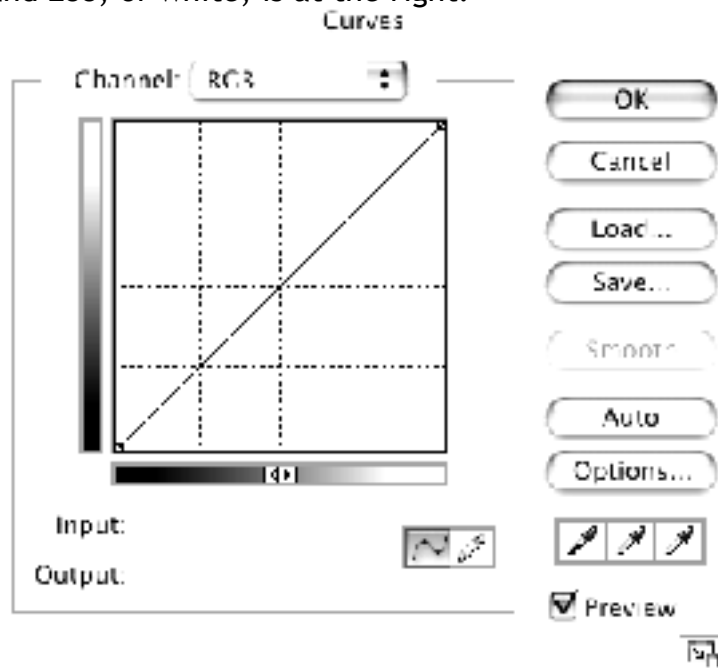


Colour Manipulation

Curves

Curves represent the brightness of pixels in the image, or selection, by a curve (first appearing as a diagonal line). 0 or black, is at the bottom left of the curve and 255, or white, is at the right.

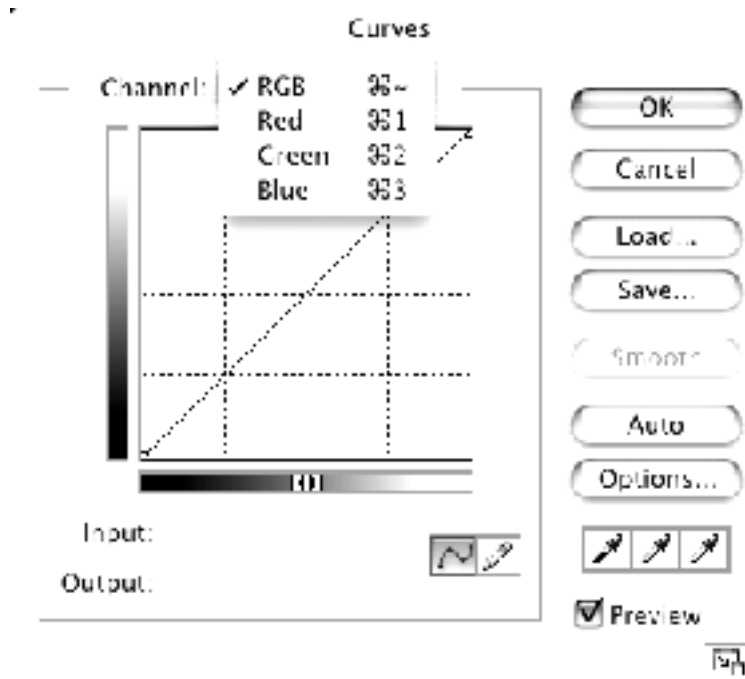


Dragging the curve upwards will make the pixels of that corresponding tone brighter and dragging down will make them darker. For example, clicking on the middle of the curve and dragging upwards will make the midtones of the image lighter. Dragging the left of the curve to the top and the right to the bottom, reversing the direction of the diagonal line, will produce a negative image

1. Open "angkor.psd", Save As "angkor01.psd" and from the Image menu choose Adjustemnt -> Curves
2. Drag the curve upwards in the middle to slightly lighten the image.
3. Drag downwards slightly at the left bottom edge to darken the shadows.

Colour adjustment with Curves

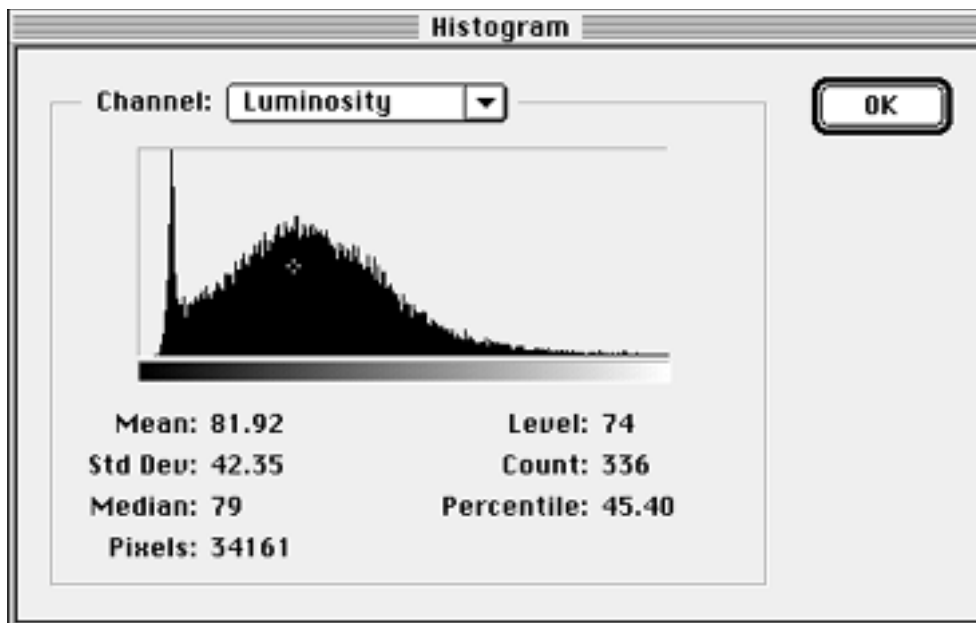
1. Select the sky using Select -> Select Colour Range
2. Open the Curves dialogue box



3. Choose to work on only the Green channel
4. Drag the curve to make the sky purple-ish then press OK
5. Inverse the selection
6. Re-open the curves dialogue box
7. Choose to work on the Green channel again and drag the curve to make the selected area more green.
8. Press OK and then save the file.

Histograms

display information about the pixels in the image, or selection, with a graph. The number of pixels that have a particular tone are represented by the height of the black graph. Black pixels (0) are at the left of the graph and white pixels (255) are at the right.



Histograms are useful for checking the tonal range of an image, particularly the details of highlights and shadows. If there are sections of the graph with gaps, then there are no pixels with those tones and will be no detail. A good range, for high quality film output, usually includes detail from 10 (very dark grey) to 240 (close to white). Video displays a more reduced range than this. Do test outputs to check.

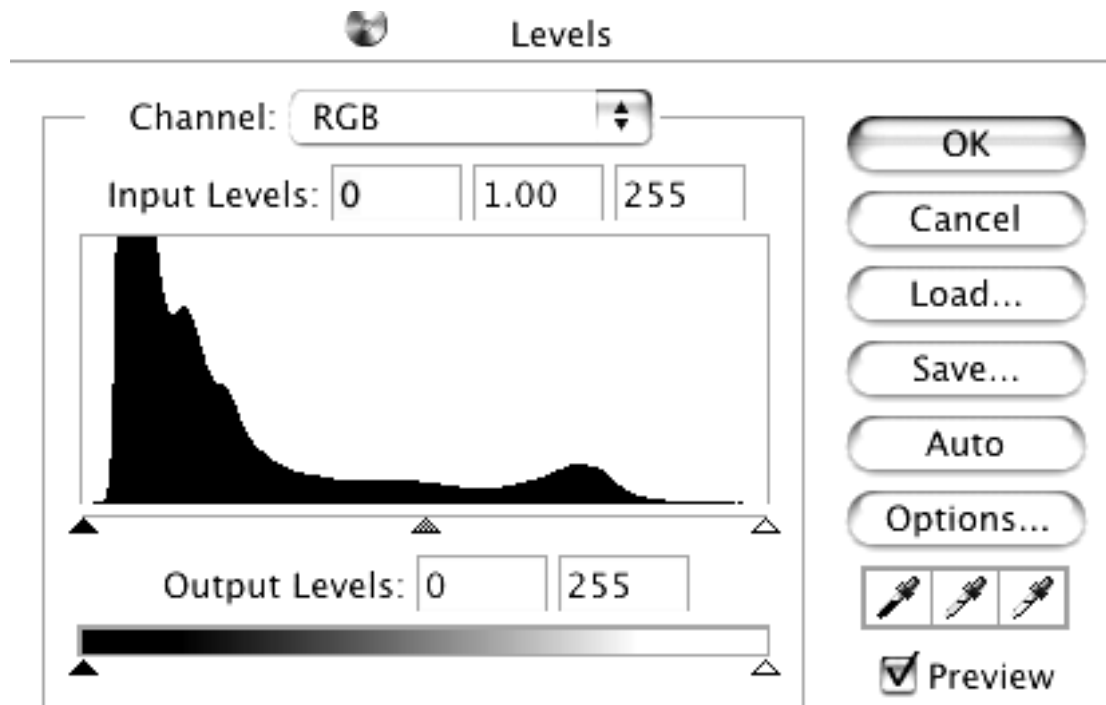
The histogram dialogue box (as above) also gives information such as:

- mean - the average brightness
- std dev - how widely the tones vary
- median - the middle tone
- pixels - the total number of pixels in the image or selection
- level - the tone of the selected single pixel
- count - how many pixels have this tone
- percentile - percentage of pixels below the selected single pixel's level

Levels

The Levels dialogue box uses histograms to allow you to manipulate contrast and colour.

1. Open "sushifishLowcontrast.psd" and Save As "sushifish01.psd"
2. From the Image menu choose Adjustments -> Levels



3. In the levels dialogue box, using the slider under the histogram, drag the black triangle inwards to darken the shadows without altering the highlight detail.
4. To save the settings being used, press Save and name the file "darkcontrast"
5. Press Ok back in the Levels dialogue box to apply the changes.
6. Open "kittyLowContrast.psd" and Save As "kitty01.psd"
7. Open the Levels
8. Press Load and locate the "darkcontrast" file
9. Press OK and the same change will be made to this image.

Many other dialogue boxes in Photoshop have similar Save and Load functions to make settings re-usable.

Semi-automatic adjustment

1. Re-open the levels dialogue box
2. This time use the black tipped eyedropper tool (for a semi-automatic adjustment) and click on the image in the darkest background area you can find.

This makes that tone absolute black and adjusts other tones correspondingly. The white eyedropper works in the same way but makes the chosen tone absolute white, the grey eyedropper sets midtones similarly. The Curves dialogue box has an identical toolset of eyedroppers.

Colour adjustment with Levels

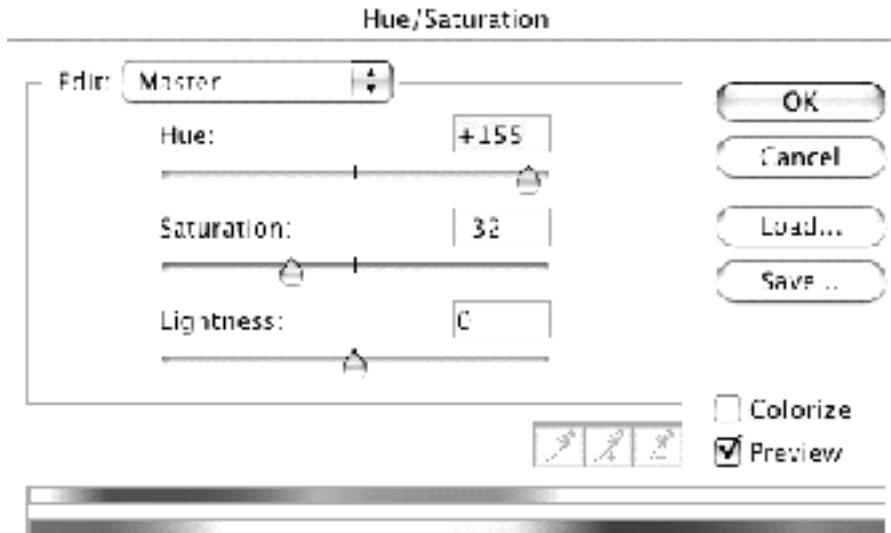
1. Re-open the Levels dialogue box
2. Choose to work only on the Red channel
3. Drag the grey triangle slider until the fish has a reddish tinge but the green cap is still green.
4. Press OK and save the file.

Decreasing contrast with Levels

1. Open "fluffyDollContrasty.psd" and Save As "fluffyDoll01.psd"
2. Open the levels dialogue box
3. Use the white triangle slider under the bottom gradient bar to decrease the contrast and make the image darker.
4. Press OK and save the file.

Hue Saturation and Value adjustments

1. Open "orangeTexture.psd" and Save As "blueTexture.psd"
2. From the image menu choose Adjustments -> Hue/Saturation

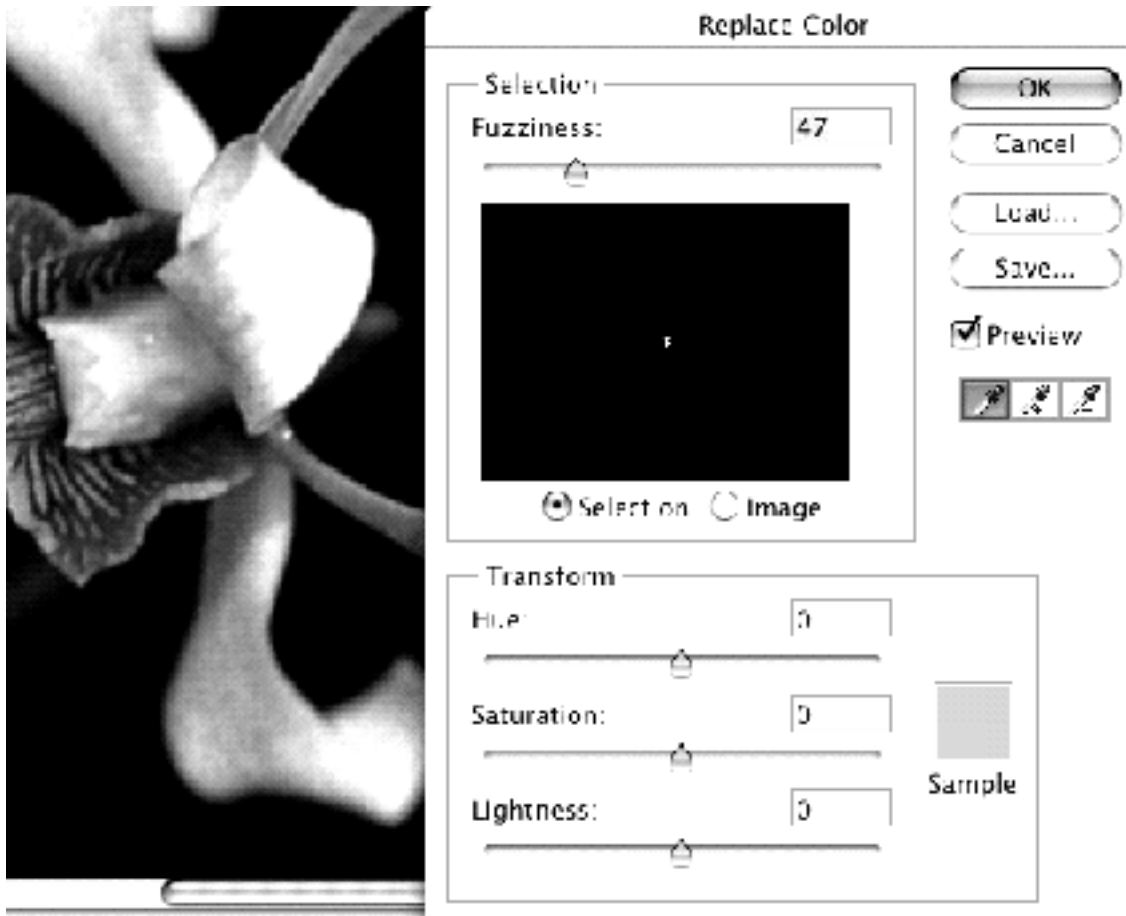


3. Drag the Hue slider to change the colour, drag the saturation slider to change the intensity and the lightness slider to make it darker or lighter, until you have a blue texture.

Replace Colour

Replace Colour is a combination of Select Colour Range and Hue/Saturation that allows you to pick up a certain colour range throughout an image and adjust its values.

1. open "orchid.psd" and Save As "orchid01.psd"
2. From the Image menu choose Adjustments -> Replace Colour



3. Click on the image on the yellow centre of the flower
4. use the fuzziness slider and open eyedropper to pick up all the yellow in the centre
5. Change the hue to a red.
6. Press OK and save the file.

Test Prints

It is wise to test the printer you will be using for your project as soon as is practical. With your own scanned imagery, collage a file using the darkest and lightest parts of your images as well as some midtones. Skin tone is good to test as any colour casts are easy to see.

When you have collaged the file, set its image size to be the smallest that you can for that printer and arrange for a test print.

If this print comes back too dark, divide your test print file into 4 areas and give each a slightly brighter adjustment. Similarly, if the print comes back too red, divide the test print file and give each area a slightly more cyan adjustment. Keep notes on the settings you used for the adjustments.

When this second test has been printed, you will have an accurate record of how to alter the colour in your final image before printing.